

## IN THE CLAIMS

1-9. (canceled)

10. (currently amended) A method of ~~reducing~~ ~~preventing~~ neuronal cell death in a mammal, comprising:

administering to the mammal a nucleic acid molecule comprising a coding sequence for a neuronal marker (NM) protein selected from the group consisting of: NM Acetylcholine receptor alpha 5; Nerve growth factor receptor, fast; Rat insulin-like growth factor binding protein (rIGFBP-6) mRNA, complete eds.; transforming growth factor, beta receptor 1; taurine/beta alanine transporter; Rat mRNA for proteasome subunit RC10-II, complete eds.; Cholinergic receptor, nicotinic, alpha polypeptide 7 (neuronal nicotinic acetylcholine receptor alpha 7) (bungarotoxin alpha); 6-phosphofructo 2-kinase/fructose 2,6-bisphosphatase 4; heterogeneous nuclear ribonucleoproteins methyltransferase like 2 (S. cerevisiae); R. rattus mRNA for epididymal secretory glutathione peroxidase; matrix metalloproteinase 14, membrane inserted; cAMP response element-binding protein; Solute carrier family 2 A2 (neuron glucose transporter); ATPase, Na<sup>+</sup>/K<sup>+</sup> transporting, alpha 1 polypeptide; Fyn proto-oncogene; protein kinase inhibitor, alpha; Rattus norvegicus galactosyltransferase associated kinase (GTA) mRNA, complete eds; Early growth response 1; Glutathione S-transferase, placental enzyme-pi type; neogenin; ATP synthase, H<sup>+</sup> transporting, mitochondrial F0 complex, subunit c (subunit 9), isoform 1; 36 kDa calcium dependent phospholipid binding protein; This sequence comes from Fig. 1; conceptual translation differs that in published reference; calpactin 1; annexin II-36 kDa calcium dependent phospholipid binding protein [rats, RBL-2H3 basophilic leukemia cells, mRNA, 1362 nt]; Murine leukemia viral (v-rat-1) oncogene homolog 1 (3611-MSV); Inhibitor of DNA binding 1, helix-loop-helix protein (splice variation); alternative splicing; see also

~~D28754; Rat mRNA for cyclin dependent kinase 2 alpha.; Tyrosine 3 mono-  
oxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide; Solute carrier  
family 25, member 5 (adenine nucleotid translocator 2, fibroblast isoform (ATP-ADP carrier  
protein)); Dopa decarboxylase (aromatic L-amino acid decarboxylase); cadherin 22; Rat  
thymidine kinase mRNA, 5' end.; Solute carrier family18 (vesicular monoamine) member 1  
(chromaffin granule amine transporter); mitogen-activated protein kinase 6; R.norvegicus mRNA  
for Cdk-activating kinase; ADP-ribosylation factor 2; mismatch repair protein; CD24 antigen;  
glutamate-cysteine ligase, modifier subunit; PDZ and LIM domain 1 (elfin); casein kinase II  
beta-subunit; Inhibitor of DNA binding 3, dominant-negative helix-loop-helix protein; Rattus  
norvegicus Sprague-Dawley lipid-binding protein mRNA, complete cds; Rat mRNA for cyclin  
D1, complete cds.; Proliferating cell nuclear antigen; bone morphogenetic protein 2; VGF nerve  
growth factor inducible; activity regulated cytoskeletal associated protein; Fos like antigen 1;  
Cyclin G1; taurine/beta-alanine transporter; Vesicle associated membrane protein (synaptobrevin  
2); unetion plakoglobin; Inhibitor of DNA binding 3, dominant-negative helix-loop-helix protein;  
Heat shock 27 kDa protein; Solute carrier family18 (vesicular monoamine) member 1  
(chromaffin granule amine transporter); mitogen-activated protein kinase 6; Interleukin 6 signal  
transducer; Synaptophysin; latexin; Nerve growth factor receptor, fast; 36 kDa calcium-  
dependent phospholipid-binding protein; This sequence comes from Fig. 1; conceptual  
translation differs that in published reference; calpactin 1; annexin II-36 kDa calcium-dependent  
phospholipid-binding protein [rats, RBL-2H3-basophilic leukemia cells, mRNA, 1362 nt];  
transcription factor AP-1 (AA 1-334); Rat c-jun oncogene mRNA for transcription factor AP-1;  
B-cell translocation gene 1; anti-proliferative/putative anti-proliferative factor; glycoprotein  
hormones, alpha subunit; Adenomatosis polyposis coli; Rattus norvegicus jun-D gene, complete~~

~~eds; R.rattus mRNA for heat shock protein 70; solute carrier family 30 (zinc transporter), member 1 zinc transporter; Cathepsin L; eukaryotic initiation factor 5 (eIF-5); 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1; cysteine-rich protein 3; Solute carrier family 7 member A1 (amino acid transporter cationic 1); Cytochrom P450 Lanosterol 14 alpha-demethylase; myo box dependent interacting protein 1; plectin; ATPase, Ca<sup>++</sup> transporting, plasma membrane 1; Rattus norvegicus Sprague-Dawley lipid-binding protein mRNA, complete eds; cyclin-dependent kinase inhibitor 1A (P21); Annexin V; bone morphogenetic protein 2; 6-phosphofructo 2-kinase/fructose 2,6-biphosphatase 4; Tumor necrosis factor receptor superfamily, member 1a; ezrin; Pim 1 oncogene; Fos-like antigen-2 transcription factor; B-cell translocation gene 2, anti-proliferative; Rattus norvegicus RIN1 mRNA, complete eds; Rat brain glucose transporter protein mRNA, complete eds; jun-B proto-oncogene; VGF nerve growth factor inducible; Interleukin 2 receptor, beta chain; Early growth response 1; Rat mRNA for LDL receptor; Rat mRNA for 53 kD polypeptide induced by growth factors (EGF) and oncogenes (H-ras, src, polyoma middle T); urinary plasminogen activator receptor 2 urinary type plasminogen activator receptor; Rat transformation associated protein (24A) mRNA, complete eds; serine (or cysteine) proteinase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1; Fos-like antigen 1; and activity regulated cytoskeletal-associated protein, whereby neuronal cell death in the mammal is reduced ~~inhibited or prevented~~.~~

11. (currently amended) A method of ~~reducing preventing~~ neuronal cell death in a mammal, comprising:

administering to the mammal a purified human neuronal marker (NM) protein ~~selected from the group consisting of:~~ NM-Acetylcholine receptor alpha 5; Nerve growth factor receptor; ~~fast;~~ Rat insulin-like growth factor binding protein (rIGFBP-6) mRNA, complete eds;

~~transforming growth factor, beta receptor 1; taurine/beta-alanine transporter; Rat mRNA for proteasome subunit RC10 H; complete cds.; C holinergic receptor, nicotinic, alpha polypeptide 7 (neuronal nicotinic acetylcholine receptor alpha 7) (bungarotoxin alpha); 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 4; heterogenous nuclear ribonucleoproteins methyltransferase-like 2 (S. cerevisiae); R.rattus mRNA for epididymal secretory glutathione peroxidase; matrix metalloproteinase 14, membrane-inserted; cAMP response element binding protein; Solute carrier family 2 A3 (neuron glucose transporter); ATPase, Na<sup>+</sup>/K<sup>+</sup> transporting, alpha 1 polypeptide; Fyn proto-oncogene; protein kinase inhibitor, alpha; Rattus norvegicus galactosyltransferase-associated kinase (GTA) mRNA, complete cds; Early growth response 1; Glutathione S-transferase, placental-enzyme pi-type; neogenin; ATP synthase, H<sup>+</sup> transporting, mitochondrial F0-complex, subunit c (subunit 9), isoform 1; 36 kDa calcium-dependent phospholipid-binding protein; This sequence comes from Fig. 1; conceptual translation differs that in published reference; calpactin 1; annexin II-36 kDa calcium-dependent phospholipid-binding protein [rats, RBL-2H3 basophilic leukemia cells, mRNA, 1262 nt]; Murine leukemia viral (v-raf-1) oncogene homolog 1 (3611 MSV); Inhibitor of DNA binding 1, helix-loop-helix protein (splice variation); alternative splicing; see also D28754; Rat mRNA for cyclin dependent kinase 2-alpha; Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein; zeta polypeptide; Solute carrier family 25, member 5 (adenine nucleotide translocator 2, fibroblast isoform (ATP-ADP carrier protein)); Dopa decarboxylase (aromatic L-amino acid decarboxylase); cadherin 22; Rat thymidine kinase mRNA, 5' end.; Solute carrier family 18 (vesicular monoamine) member 1 (chromaffin granule amine transporter); mitogen-activated protein kinase 6; R.norvegicus mRNA for Cdk-activating kinase; ADP-ribosylation factor 2; mismatch repair protein; CD24 antigen; glutamate-cysteine ligase, modifier subunit; PDZ and~~

~~LIM domain 1 (elfin); casein kinase II beta subunit; Inhibitor of DNA binding 3, dominant negative helix-loop-helix protein; Rattus norvegicus Sprague-Dawley lipid-binding protein mRNA, complete cds; Rat mRNA for cyclin D1, complete cds.; Proliferating cell nuclear antigen; bone morphogenetic protein 2; VGF nerve growth factor inducible; activity regulated cytoskeletal-associated protein; Fos-like antigen 1; Cyclin G1; taurine/beta-alanine transporter; Vesicle-associated membrane protein (synaptobrevin 2); unetion plakoglobin; Inhibitor of DNA binding 3, dominant negative helix-loop-helix protein; Heat shock 27 kDa protein; Solute carrier family 18 (vesicular monoamine) member 1 (chromaffin granule amine transporter); mitogen-activated protein kinase 6; Interleukin 6 signal transducer; Synaptophysin; latexin; Nerve growth factor receptor, fast; 36 kDa calcium-dependent phospholipid-binding protein; This sequence comes from Fig. 1; conceptual translation differs that in published reference; calpactin 1; annexin II-36 kDa calcium dependent phospholipid binding protein [rats, RBL 2H3 basophilic leukemia cells, mRNA, 1262 nt]; transcription factor AP 1 (AA 1 324); Rat c-jun oncogene mRNA for transcription factor AP 1.; B-cell translocation gene 1; anti-proliferative/putative anti-proliferative factor; glycoprotein hormones, alpha subunit; Adenomatosis polyposis coli; Rattus norvegicus jun-D gene, complete cds; R.rattus mRNA for heat shock protein 70.; solute carrier family 30 (zinc transporter), member 1zinc transporter; Cathepsin L; eukaryotic initiation factor 5 (eIF-5); 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1; cysteine-rich protein 3; Solute carrier family 7 member A1 (amino acid transporter cationic 1); Cytochrom P450 Lanosterol 14 alpha-demethylase; myc box dependent interacting protein 1; plectin; ATPase, Ca++ transporting, plasma membrane 1; Rattus norvegicus Sprague-Dawley lipid-binding protein mRNA, complete cds; cyclin-dependent kinase inhibitor 1A (P21); Annexin V; bone morphogenetic protein 2; 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4; Tumor~~

~~neurosis factor receptor superfamily, member 1a; ezrin; Pim-1 oncogene; Fos-like antigen 2 transcription factor; B-cell translocation gene 2, anti-proliferative; Rattus norvegicus RIN1 mRNA, complete cds; Rat brain glucose transporter protein mRNA, complete cds; jun B proto-oncogene; VGF nerve growth factor inducible; Interleukin 2 receptor, beta chain; Early growth response 1; Rat mRNA for LDL receptor; Rat mRNA for 53 kD polypeptide induced by growth factors (EGF) and oncogenes (H-ras; src; polyoma middle T); urinary plasminogen activator receptor 2 urinary-type plasminogen activator receptor; Rat transformation-associated protein (34A) mRNA, complete cds; serine (or cysteine) proteinase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1; Fos-like antigen 1; and activity-regulated cytoskeletal-associated protein, whereby neuronal cell death in the mammal is reduced inhibited or prevented.~~

12. (currently amended) The method of claim 10 or 11 wherein the ~~subject~~ mammal has retinal cell degeneration.

13-53. (canceled)